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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/783,729

02/20/2004

Marie S. Chan

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10/17/2008

Legal Department (M-495)

P.O. Box 1926

Spartanburg, SC 29304

EXAMINER

HARDEE, JOHN R

ART UNIT

PAPER NUMBER

1796

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/783,729	<b>Applicant(s)</b> CHAN ET AL.	
	<b>Examiner</b> John R. Hardee	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5, 8-12, 18, 31, 34, 37 and 39-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-12, 18, 31, 34, 37 and 39-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

**Applicant's appeal is vacated and *ex parte* prosecution is resumed.**

### ***Claim Rejections - 35 USC § 103***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-5, 8-12, 18, 31, 34, 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trinh et al., US 4,481,126. Trinh discloses a substantially nonabrasive, liquid car cleaner composition which cleans car surfaces without an external source of water to wash or rinse. The product is a composition of up to 30% polymeric solids, up to 95% liquid carrier and a suspension aid. (abstract) Other optional ingredients such as waxes, fluorosurfactants, anticorrosion agents, antistatic agents, sunscreens, inorganic mild abrasives, pigments, perfumes, and preservatives can also be used for added benefits. (col. 2, lines 64-68) The liquid car cleaner composition of this invention comprises organic polymeric solids selected from the group consisting of: porous and/or nonporous powdered particles in the particle size range of from 1 micron to about 250 microns (col. 2, lines 37-42) A liquid carrier is required and can be used at a level of up to 95% by weight of the composition. Water is disclosed as a suitable liquid carrier, although mixtures of water and aliphatic hydrocarbon solvents are preferred. Both surfactants and thickeners are used as the suspending agent. The surfactants are also used as emulsifier and cleaning aid. (col. 2, lines 53-56 and 59-62) The suitable polymeric particulate materials can be synthetic

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or naturally-occurring polymeric materials include, but are not limited to, urea-formaldehyde resin, whereas the naturally-occurring polymeric materials are cellulosic materials. (col. 3, lines 34-44) The suspending agents useful in this invention are suitable surfactants and thickeners and mixtures thereof. These surfactant suspending agents have the properties of dispersing solid particles and liquid droplets. They are used to disperse the polymeric particles throughout the cleaner compositions.

Substantially any surfactant materials which are compatible with the other components in the composition of this invention can be utilized. These include nonionic, anionic, cationic, amphoteric and zwitterionic surfactants. Regarding claim 11, the reference discloses at col. 7, line 13 that nonionic surfactants generally are useful in the compositions, and the structure in claim 11 is generic to most nonionic surfactants.

Regarding claim 12, the recited sulfates are notoriously common anionic surfactants, the use of which would be immediately envisaged by the person of ordinary skill in the surfactant art in view of the disclosure of the utility of anionic surfactants. The composition of this invention can consist of up to 10% by weight of a suspending agent surfactant; preferably between 0.4% and 2%. Thickener suspending agents that can be utilized include, but are not limited to, sodium carboxymethyl cellulose, hydroxyethyl cellulose, and natural polysaccharides such as gums. They are used at effective levels of up to 10%. (col. 5, lines 18-45) Although the reference does not teach that the surfactant provides a surface tension in water of about 40 dynes per cm or less, the amounts of water and of surfactant disclosed in the reference overlap with those

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presently recited, so the recited surface tensions can be met while working within the teachings of the reference.

The reference fails to teach the specific surfactants of claims 11 and 12.

Although the reference fails to teach the specific surfactants of claim 11 and 12, there would be a reasonable expectation of success to modify the prior art to arrive at the instantly claimed invention because the prior art does suggest that any surfactant that is compatible with the system may be used. Regarding claim 34, the reference teaches at col. 4, lines 60+ that hydrocarbons solvents may be added. At col. 5, line 43, the reference teaches that polyethylene oxide may be added. Polyethylene oxide is a polyoxyalkylene material.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to create the instantly claimed composition in view of the Trinh cleaning composition, which contains all the required components in the required amounts.

3. Claims 37, 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trinh et al., US 4,481,126 in view of Froehlich, US 3,910,848 or Brown, US 5,514,302. The Trinh reference is summarized above. It fails to teach that aerosol may be used with the liquid cleaner of the variety disclosed.

Although the reference does not disclose the use of an aerosol propellant, the use of aerosols with cleaning compositions is well known in the art. Froehlich, the secondary reference in analogous art teaches that a cleaning composition containing a polymer urea-formaldehyde polymer particles having a particle size of from 10 to 105

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microns and an oil value of at least 90, a halogenated solvent boiling at from 45 degrees. to 120 degree C., a silica antissettling agent, a cationic antistatic agent, and an aerosol propellant selected from at least one of trichlorofluoromethane, dichlorodifluoromethane, 1,2-dichlorotetrafluoroethane, propane, isobutane and butane. (col. 1, lines 37-60).

Therefore there is a reasonable expectation of success that an aerosol may be used with the composition of the reference as the composition of the secondary reference has similar structural properties, uses and components.

Brown, the secondary reference in analogous art teaches an improved aqueous fabric cleaning shampoo composition fabric solid cleaning polymer, surfactant in water Which may be in the form of a self-pressurized aerosol, with a conventional propellant such as dimethyl ether or one or more saturated alkanes containing from 2 to 6 carbon atoms such as propane, isopropane, n-butane, isobutane, isopentane or n-hexane is added through the valve. Although the reference does not disclose the use of an aerosol propellant, the use of aerosols with cleaning compositions is well known in the art. Brown, (abstract col. 10, lines 27-48).

Therefore there is a reasonable expectation of success that an aerosol may be used with the composition of the reference as the composition of the secondary reference has similar structural properties, uses and components.

The references are analogous because they are all directed to the cleaning of surfaces.

4. Claims 1-5, 8-12, 18, 31, 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Froehlich et al. (US 4,013,594) in view of Chapman et al. (US

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4,493,781). Froehlich et al. teach methods of cleaning carpets where compositions comprising about 30-90% particulate polymeric urea-formaldehyde having a particle size of 10-105 microns and a oil absorption value of no less than 90, 2-10% cationic antistatic agent and about 10-70% fluid, wherein the fluid is up to 100% water and the water contains sufficient surfactant to give a surface tension of less than 40 dynes per centimeter (column 1, lines 40-52; column 2, lines 40-50; column 3, lines 45-50; column 4, lines 1-4), and optionally dust suppressants (column 3, lines 45-58) and up to about 1% of optical brightening agents and mildewcides (column 7, lines 5-10) are applied to carpets. The examiner takes the position that choice of a specific mildewcide would be obvious in the absence of unexpected results. Froehlich et al. further teach methods of agitating the composition into the carpet, dried and removal by vacuum cleaner (column 5, lines 45-55). Froehlich et al. does not teach clays as a component of the compositions or liquid formulations. Chapman et al., in the analogous art of carpet cleaning, teach that it is conventional in powdered carpet cleaning compositions to add clays such as bentonite, kaolin and the like as brightening agents (column 5, lines 1-15).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the compositions and methods of Froehlich et al. by incorporating the brightening clays taught by Chapman et al. because Chapman et al. teach these compounds as effective in brightening carpets in powdered carpet cleaning formulations. Furthermore, Froehlich et al. invite the inclusion of additives including brightening agents. One of ordinary skill in the art would have been motivated to combine the teachings of the references absent unexpected results.

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5. Claims 37, 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Froehlich et al., US 4,013,594 in view of Froehlich, US 3,910,848 or Brown, US 5,514,302. The '594 reference is summarized above. It further discloses that acrylates may be present (col. 5, line 42). It fails to teach that aerosol may be used with the liquid cleaner of the variety disclosed.

Although the reference does not disclose the use of an aerosol propellant, the use of aerosols with cleaning compositions is well known in the art. Froehlich '848, the secondary reference in analogous art teaches that a cleaning composition containing a polymer urea-formaldehyde polymer particles having a particle size of from 10 to 105 microns and an oil value of at least 90, a halogenated solvent boiling at from 45 degrees. to 120 degree C., a silica antisetling agent, a cationic antistatic agent, and an aerosol propellant selected from at least one of trichlorofluoromethane, dichlorodifluoromethane, 1,2-dichlorotetrafluoroethane, propane, isobutane and butane. (col. 1, lines 37-60).

Therefore there is a reasonable expectation of success that an aerosol may be used with the composition of the reference as the composition of the secondary reference has similar structural properties, uses and components.

Brown, the secondary reference in analogous art teaches an improved aqueous fabric cleaning shampoo composition fabric solid cleaning polymer, surfactant in water Which may be in the form of a self-pressurized aerosol, with a conventional propellant such as dimethyl ether or one or more saturated alkanes containing from 2 to 6 carbon atoms such as propane, isopropane, n-butane, isobutane, isopentane or n-hexane is



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added through the valve. Although the reference does not disclose the use of an aerosol propellant, the use of aerosols with cleaning compositions is well known in the art. Brown, (abstract col. 10, lines 27-48).

Therefore there is a reasonable expectation of success that an aerosol may be used with the composition of the reference as the composition of the secondary reference has similar structural properties, uses and components.

### ***Double Patenting***

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-5, 8-12, 18, 31, 34, 37 and 39-42 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 41, 49 and 50 of copending Application No. 10/783,064. Although the

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conflicting claims are not identical, they are not patentably distinct from each other because the '064 application recites a method of cleaning carpet using compositions which read closely on those presently recited. It would have been obvious at the time that the invention was made to make compositions as presently recited, because the '064 recites methods of using such compositions.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to the examiner, Dr. John R. Hardee, whose telephone number is (571) 272-1318. The examiner can normally be reached on Monday through Friday from 8:00 until 4:30. In the event that the examiner is not available, his supervisor, Mr. Harold Pyon, may be reached at (571) 272-1498.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

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Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/John R. Hardee/  
Primary Examiner  
October 3, 2008